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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,466	03/30/2004	Michel Bernard Lemistre	28944/40045	4795

7590 11/02/2007
MARSHALL, GERSTEIN & BORUN LLP
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EXAMINER

HUYNH, PHUONG

ART UNIT	PAPER NUMBER
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2857

MAIL DATE	DELIVERY MODE
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11/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/813,466

Applicant(s)

LEMISTRE ET AL.

Examiner

Phuong Huynh

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 12, 13 and 19 is/are rejected.
- 7) ☒ Claim(s) 2-11, 14-18 and 20-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 12, 13, and 19 are rejected under 35 U.S.C. 102(a) as being anticipated by Lemistre et al. "Simulation of an electromagnetic health monitoring concept for composite materials. Comparison with experimental data", Vol. 5047, 2003, pages 130-139 (hereinafter "Lemistre").

Regarding claims 1, 13, and 19, the Lemistre et al. discloses a device for health monitoring of an area of a structural element comprising at least one dielectric material of dielectric permittivity ϵ_r comprising:

(A) means of emission of electromagnetic radiation extending in a direction, the said electromagnetic field generating an electric field in the area, and (B) detection means suitable for measuring a first measured component of an electric field, along a first direction of detection [see Lemistre: 3. *Application to structural Health Monitoring Domain*]

characterized in that the said device furthermore comprises calculation means (C) suitable for obtaining a value of the dielectric permittivity ϵ_r in the said area on the basis of the said first measured component [see Lemistre: 1-Introduction; 4.1-Basic Principle; and sections 5.1-5.3].

Regarding claim 12, Lemistre discloses that in which said structural element comprises no imperfectly conducting material [see Lemistre: 2. *Theoretical considerations*] and in which the means of emission are means of emission of electrical radiation that are suitable for generating an electric field [see Lemistre: 3. *Application to structural Health Monitoring Domain and 4.1*].

Allowable Subject Matter

2. Claims 2-11, 14-18, and 20-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Amendment

3. The declaration/affidavit under 37 CFR 1.132 filed 08/08/2007 is insufficient to overcome the rejection of claims 1, 13, and 19, based upon 102(a) as set forth in the last Office action because:

Applicants fail to show that the relevant portions of the reference, i.e. the Lemistre publication, originated with or obtained from applicants [see Office Action mailed on 03/08/2007: Page 4, line 19 for cited relevant portions] [see MPEP 716.10].

In contrast, Applicant declared that Mr. Liebeaux (another) as a co-author of the Lemistre SPIE publication, contributed to parts 4 and 5 of the Lemistre SPIE publication [see Affidavit: Page 2, at 4].

Further, in the Lemistre publication, in the Abstract, it is said that "This concept, based on the detection of local electric conductivity variations and/or local dielectric permittivity variations, has allowed to design a demonstrator having a great sensitivity to detect main defects such as delaminations, fiber breaking, burning and liquid ingress. However, this technique at the present state, does not presently allow perform quantitative measurements of electric conductivity and dielectric permittivity. In order to remedy to this disadvantage, a numerical simulation with an original method developed at ENS-Cachan (Ecole Normale Supérieure de Cachan, France) by D. Placko and N. Liebeaux, has been performed."

Examiner Note

4. In the Office Action mailed on 03/08/2007, at Page 4, line 10, "the admitted prior art" should have been "Lemistre et al."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Huynh whose telephone number is 571-272-2718. The examiner can normally be reached on M-F: 8:30 AM - 5:00 PM.

Application/Control Number:
10/813,466
Art Unit: 2857

Page 5

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on 571-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phuong Huynh
Examiner
Art Unit 2857

PH
October 24, 2007

Hal Wachsman
HAL WACHSMAN
PRIMARY EXAMINER
A. V. 2857